

# Recommendations for IT Portfolio Management and the Enterprise Alignment Database

September 15, 2011



# Purpose

- To manage statewide IT Assets and related Projects and Acquisitions as a Portfolio
  - Industry best practice and CIO focus area to manage the life cycle cost, benefits, and investments related to the total set of IT assets within the enterprise
  - “Asset” – the general sense of an IT software or hardware item (not a more specific sense of a capital asset)
  - Recognize the need for applying reasonable levels of granularity in a graded approach, i.e. start with the big things, and grow appropriate level of granularity over time

# Rationale

- To be more cost-effective in the use of IT across the State
- To save \$ for the Departments, Divisions, Attached Agencies, and Programs
- To improve the overall strategic impact of IT in support of Departments' mission and services
- To enhance visibility into
  - convergence on standard technologies and services
  - opportunities to leverage volume and obtain economies of scale in IT purchases
  - opportunities to repurpose assets across the State
- To support better purchasing decisions and be more efficient in the long-term with IT spending
- To simplify and streamline the IT acquisition and asset inventory processes and automate with web-enabled tools
  - Replacing AD-77 and ICSD-T205 with improved effectiveness

# Scope

- IT Portfolio Management
  - Maintenance of Steady-State (SS) Inventory of Assets
    - Applications
    - Software - Middleware (enterprise, multi-user, server level) and Desktop Utility (single-user, PC level)
    - Hardware - Servers/Mainframes, Other Device Types & Counts + Devices (Scanned Data)
    - Mapping data across these layers.
  - Identification and Tracking of IT Projects
    - Development, Modernization, and Enhancement (DME) Initiatives
  - IT Acquisition (Investment) Request Initiation, Review, and Approval

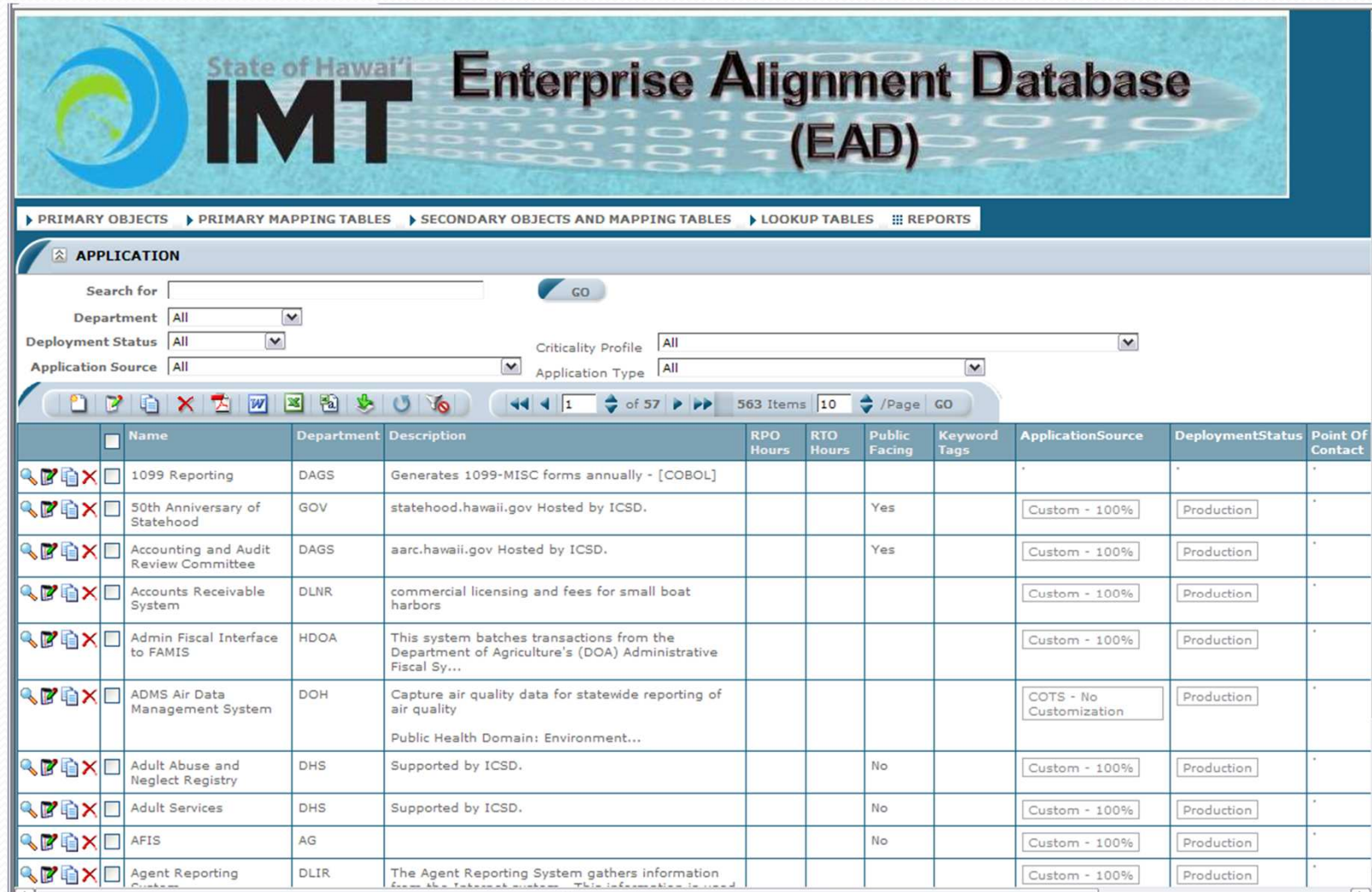
## Recommended Solution

- OI/MT-sponsored enterprise level IT portfolio management process
  - Administrative Directive(s) – Policies
  - Program Plan
    - Concept of Operations; Standards/Business Rules; Roles and Responsibilities
  - Procedures
  - Training
- Automated system support through EAD, as an interim solution
  - Web-enabled application with IT Portfolio (DME Initiatives and Steady-State Inventory) and Request functionality
  - Agile solution that supports evolution and incremental improvement of the new CIO-defined processes

## What is the EAD?

- The Enterprise Alignment (formerly Assessment) Database – both a database and a web application
  - Database repository of IT assets within the State
  - Web application for capture, update, and reporting
- A key deliverable of SAIC's Assessment of State Services and IT Baseline
- Establishes a baseline of the “As Is” or current state of IT
- Enables on-going maintenance of the information
- Provides a foundation for future planning and decisions

# A Tour of the EAD



**State of Hawai'i IMT Enterprise Alignment Database (EAD)**

PRIMARY OBJECTS PRIMARY MAPPING TABLES SECONDARY OBJECTS AND MAPPING TABLES LOOKUP TABLES REPORTS

**APPLICATION**

Search for

Department

Deployment Status

Application Source

Criticality Profile

Application Type

563 Items 10 /Page GO

	Name	Department	Description	RPO Hours	RTO Hours	Public Facing	Keyword Tags	ApplicationSource	DeploymentStatus	Point Of Contact
	1099 Reporting	DAGS	Generates 1099-MISC forms annually - [COBOL]							
	50th Anniversary of Statehood	GOV	statehood.hawaii.gov Hosted by ICSD.			Yes		Custom - 100%	Production	
	Accounting and Audit Review Committee	DAGS	aarc.hawaii.gov Hosted by ICSD.			Yes		Custom - 100%	Production	
	Accounts Receivable System	DLNR	commercial licensing and fees for small boat harbors					Custom - 100%	Production	
	Admin Fiscal Interface to FAMIS	HDOA	This system batches transactions from the Department of Agriculture's (DOA) Administrative Fiscal Sy...					Custom - 100%	Production	
	ADMS Air Data Management System	DOH	Capture air quality data for statewide reporting of air quality Public Health Domain: Environment...					COTS - No Customization	Production	
	Adult Abuse and Neglect Registry	DHS	Supported by ICSD.			No		Custom - 100%	Production	
	Adult Services	DHS	Supported by ICSD.			No		Custom - 100%	Production	
	AFIS	AG				No		Custom - 100%	Production	
	Agent Reporting	DLIR	The Agent Reporting System gathers information from the Tobacco custom. This information is used					Custom - 100%	Production	

# What Information Does the EAD have?

- Primary Objects

- Organizations
- State Services (Business Model)
  - Services for Citizens
  - Support Services (Internal)
- Applications
- Databases
- Data Centers/Server Rooms
- Servers
- Middleware and Desktop Software
- Other Supporting IT Devices

- Primary Mapping

- Services to Applications
- Applications to Applications
- Applications to Servers
- Applications to Databases
- Applications to Middleware
- Servers to Data Centers
- Owning Organizations to Everything

# EAD Technical Underpinnings

- Built on a relational database (SQL Server Express)
- .Net application generated by Ironspeed
  - Generating feature supports agile deployment approach
  - Provides a data model driven solution that is evolving to meet the specific needs of the State of Hawai'i
- Currently hosted on a Windows 2008 instance in the Amazon (AWS) cloud
- EAD Data Extracts
  - Data export by table available to a variety of formats:
    - Adobe .pdf tables
    - Microsoft Word tables
    - Microsoft Excel spreadsheets
    - Comma separated values .csv files



# IT Portfolio Management Use Cases

- IT Asset Inventory Loading and Validation
  - Initial EAD Data Loading – SAIC currently working.
  - Data Validation – SAIC facilitating initial review by the Departments; additional on-line validation actions to follow.
- On-going Maintenance
  - IT Asset Life-cycle Management
    - Apply Status, Stewardship, Location Change
    - Disposition/Retire IT Assets
    - IT Discovery Tool Reconciliation
  - IT Project Life-cycle Management
    - Identify New Project
    - Review New Project
    - Apply Project Profile Changes
- IT Investment Life Cycle
  - Initiate IT Purchase Request
  - Review/Approve IT Purchase Request
  - Receive IT Assets – update Asset Inventory

# IT Acquisition Request Form (Draft)

**Edit Procurement Request**

Request Class: 001 Department Request Number: 002  
 Prog ID Organization Code: 003 Requestor Name:   
 Telephone: Request Date:   
 Hardware: ☒ Software:   
 Annual Maintenance Cost: Funding Source:   
 Subtotal: \$30.00 Mandated By Law: ☒   
 Tax Rate: 50.00 Use States Infrastructure:   
 Tax: \$15.00 Last Updated Date:   
 Shipping And Handling: \$2.00 Mandate Explanation:   
 Grand Total: \$47.00

**Expedited Benefits**

**Infrastructure Explanation**

DP Head Name: Approved For: Department Head Name By: [stephenawes] Mark As Approved  
 DP Head Status: Approved DP Coordinator Name: Mark As Approved  
 DP Head Date: 9/2/2011 3:02 PM DP Coordinator Status: \*\* Please Select \*\*  
 ICS Administrator Name: Mark As Approved DP Coordinator Date:   
 ICS Administrator Status: \*\* Please Select \*\* State Comptroller Name: Mark As Approved  
 ICS Administrator Date: State Comptroller Status: \*\* Please Select \*\*  
 State CIO Name: Mark As Approved State Comptroller Date:   
 State CIO Status: \*\* Please Select \*\*  
 Created By:   
 State CIO Date:

**Procurement Request Line Item**

Line Number	MDF	Manufacturer	Model	Description	Quantity	Unit Cost	Created By
1.00					2	\$5.00	

# IT Portfolio Management Roles

- Department Level (full access to Department data)
  - Department IT Manager
    - Overall responsibility for department IT portfolio management in EAD, maintains project life-cycle, IT asset life-cycle, and IT acquisition request life-cycle.
  - Department IT Administrative Assistant
    - Maintains IT asset inventory records in the EAD, performs reconciliations/comparisons (as applicable), assists in annual physical inventories (as necessary), and maintains applicable asset reporting.
    - Inputs IT acquisition request.
    - Receives hardware and software into the EAD.
  - Department Approver
    - Reviews and approves Department IT acquisition requests
- OIMT Portfolio Manager (full access to all data)
  - Overall responsibility for enterprise IT portfolio management and reporting in EAD
  - Reviews and approves Department IT acquisition requests
- OIMT IT Reviewer (read-only access to all data)
  - Able to review all IT asset, project, and acquisition information

# Business Rules and Standards

## ***Draft – to be reviewed and finalized in Procedure.***

- IT-related hardware and software will be procured by the Department through an approved investment request
- IT asset records will not be deleted; rather, they will be placed in an appropriate status (e.g. Retired, Out of Service).
- IT-related hardware and software will be received by the Department IT Administrative Assistant, added to the inventory in the EAD.
- Hardware Items will be labeled with the Asset Number.
- Hardware items in storage and not deployed for use will be stored in a secure physical Definitive Hardware Store (storage area) under the oversight of the Department IT Portfolio Manager or designated IT Asset Administrative Assistant.
- Software media, licensing, and manuals will be stored in a secure physical Definitive Software Library (DSL). In addition, software installation files will be copied to a logical Definitive Software Library (DSL). The logical Definitive Software Library (DSL) will be available in the event of a disaster. Patches and updates readily available for download from the Internet are not required to be stored in the Definitive Software Library (DSL).
- Reconciliation (comparing the data within the EAD with other tools such as discovery, network, management, server management, etc.) of the EAD shall occur as available.
- A full physical inventory of all operational critical production hardware shall be completed on an annual basis.
- A report listing all Operational Production physical servers without a documented Serial Number is generated monthly and is provided to the appropriate technical contact.